

## **Coded Magnetic Switch**

Series MAK-50

Description MAK-5046-CD-2-L

Article number 6490650399

## Wiring diagram Dimension drawing 50 2000 ±5 % LED 8 4 60 Actuating direction / Operating distance 07 . 3 04 . 3

Technical data		
Switching function		1 x NO, 1 x NC
Reference magnet		TK-50-CD/2 (6402050086)
Assured operating distance - ON	$S_{ao}$	≥ 6 mm
Assured operating distance - OFF	$S_{ar}$	≤ 22 mm
Repeat accuracy	R	$\pm0.1$ mm, under same geometrical conditions at the same temperature
Utilization category		DC-12
Frequency of operating cycles	f	1 Hz

## **Technical Data**



Electrical data		
Max. voltage		30 V DC
Max. switching current		0,02 A
Max. switching capacity		0,25 W
Voltage drop	$U_d$	≤ 3 V
Internal series resistor		27 $\Omega$ , per channel
Protection class acc. to EN IEC 61558	3	III (safety extra-low voltage)
Note		Combinations of switching voltage and switching current must not exceed the maximum switching capacity.

Mechanical data	
Enclosure	PBT, black; encapsulated reed contact
Mounting	2 holes Ø 4,3 (for M4 screws)
Indication	1 x LED yellow, actuation status
Temperature range	- 5 °C + 70 °C (cable not fixed mounted) - 25 °C + 70 °C (cable fixed mounted)
Mechanical life	3 x 10 <sup>8</sup> operating cycles
Vibration	10 G (10 - 1200 Hz)
Shock	100 G (11 ms, ½ Sinewave)
Protection type	IP 67 acc. to EN 60529
Pollution degree	3 acc. to EN 60947-1
Termination type	Cable 4 x AWG26, PVC - Outer jacket, black
Assembly position	optional (assembly on ferromagnetic material means reduction of switch distance)

ID for safety engineering	
B10d	20 x 10 <sup>6</sup> cycles (20 % load) 0,4 x 10 <sup>6</sup> cycles (nominal load)
Mission time	20 years

Standards	
	DIN EN ISO 13849-1
	EN 60947-5-3
Note	The EN 60947-5-3 standard is only fulfilled by a complete system that consists of a coded magnetic switch with related actuator and suitable safety controller.

EU Conformity	
	cc. to directive 2006/42/EC (Safety-of-Machinery-Directive)

Approvals	(N)
	UL Listed, Ind. Cont. Eq. / Class 2 Power source

Notes
Contact protection must be provided for inductive and capacitive loads.

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